



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,531	03/01/2004	Daniel L. Carter	2002-0852.01/4670-270	2754

EXAMINER	
MORRISON, THOMAS A	

ART UNIT	PAPER NUMBER
3653	

MAIL DATE	DELIVERY MODE
09/24/2007	PAPER

7590 09/24/2007
LEXMARK INTERNATIONAL, INC.
ATT: JOHN J. McARDLE, JR.
740 WEST NEW CIRCLE ROAD
LEXINGTON, KY 40550

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/790,531

Applicant(s)

CARTER ET AL.

Examiner

Thomas A. Morrison

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-18 and 20-30 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, this claim does not positively recite the structure that controls movement of the diverter to the first position and the second position. As such, it is unclear what controls the movement of the diverter.

Regarding claim 10, this claim does not positively recite the structure that controls the positioning of the diverter in the first orientation and the second orientation. As such, it is unclear what controls the positioning of the diverter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 9-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,093,690 (Ohno et al.)(cited in the 6/29/2004 IDS).

Regarding claim 1, Figs. 1 and 18A-18D show a device to move media sheets simultaneously within an image forming device comprising:

a first media nip formed by a drive roll (including 22 and/or 28) and a first roll (unnumbered roll above 22 in Fig. 1) that is positioned against the drive roll (including 22 and 28);

a second media nip formed by the drive roll (including 22 and/or 28) and a second roll (23) that is positioned against the drive roll (including 22 and 28);

a diverter (including 29) operatively connected to the drive roll (including 22 and/or 28) and controlled to move to a first position (Fig. 18A) when the drive roll (including 22 and/or 28) rotates in a first direction to align a first guide edge (contact edge of 29 in Fig. 18A) of the diverter (including 29) to guide a first media sheet into the first media nip, the diverter controlled to move to a second position (Fig. 18C) when the drive roll (including 22 and/or 28) rotates in a second direction to align a second guide edge (contact edge of 29 in Fig. 18C) of the diverter (including 29) to guide the first media sheet out of the first media nip, and align the first guide edge of the diverter to simultaneously guide a second media sheet into the second media nip. See also column 7, line 41 to column 8, line 30.

Regarding the recitation "a diverter operatively connected to the drive roll and controlled to move to a first position when the drive roll rotates in a first direction to align a first guide edge of the diverter to guide a first media sheet into the first media nip, the diverter controlled to move to a second position when the drive

roll rotates in a second direction to align a second guide edge of the diverter to guide the first media sheet out of the first media nip, and align the first guide edge of the diverter to simultaneously guide a second media sheet into the second media nip", the underlined portions of this recitation are "conditional limitations" that need not ever occur. Since the bolded portion of this recitation contains conditional limitations that need not ever occur, this bolded portion of the recitation does not define claim 1 over the prior art apparatus of Ohno et al. For example, if the drive roller is not rotated at all, this conditional limitation does not occur. As such, it is the examiner's position that all of the features of claim 1 are met by U.S. Patent No. 5,093,690 (Ohno et al.).

Regarding claim 2, Figs. 1 and 18A-18D show that the drive roll (including 22 and/or 28) is mounted to a drive shaft (27), and the first roll (unnumbered roll above 22 in Fig. 1) and the second roll (23) are each mounted to a housing of the image forming device.

Regarding claim 3, column 7, lines 57-63 disclose a motor attached to the drive roll (including 22 and/or 28) to rotate the drive roll in the first direction and the second direction.

Regarding claim 4, Figs. 1 and 18A-18D show that the first nip is formed on an upper edge of the drive roll (including 22 and/or 28), and the second nip is formed on a lower edge of the drive roll (including 22 and/or 28).

Regarding claim 9, Figs. 18A-18D show that the diverter (including 29) is positioned at an intersection of a first media path and a second media path.

Regarding claim 10, Figs. 1 and 18A-18D show a device to move media sheets simultaneously within an image forming apparatus comprising:

a drive roll (including 22 and/or 28) positioned against a first roll (unnumbered roll above 22 in Fig. 1) to form a first nip and positioned against a second roll (23) to form a second nip;

a diverter (including 29) operatively connected to the drive roll (including 22 and/or 28) and having a first guide edge (contact edge of 29 in Fig. 18A) and a second guide edge (contact edge of 29 in Fig. 18C), the diverter (including 29) positionable between a first orientation (Fig. 18A) and a second orientation (Fig. 18C); the diverter positioned in the first orientation (Fig. 18A) when the drive roll (including 22 and/or 28) rotates in a first rotational direction to guide along the first guide edge a first media sheet that is driven by the first nip in a first direction; the diverter positioned in the second orientation (Fig. 18C) when the drive roll (including 22 and/or 28) rotates in a second rotational direction to guide along the second guide edge the first media sheet that is driven by the first nip in a second direction, and simultaneously guide a second media sheet along the first guide edge that is being driven by the second nip in the first direction. See also column 7, line 41 to column 8, line 30.

Regarding the recitation "**the diverter positioned in the first orientation when the drive roll rotates in a first rotational direction** to guide along the first guide

edge a first media sheet that is driven by the first nip in a first direction; the diverter positioned in the second orientation when the drive roll rotates in a second rotational direction to guide along the second guide edge the first media sheet that is driven by the first nip in a second direction, and simultaneously guide a second media sheet along the first guide edge that is being driven by the second nip in the first direction”, the underlined portions of this recitation are “conditional limitations” that need not ever occur. Since this recitation contains conditional limitations that need not ever occur, this recitation does not define claim 10 over the prior art apparatus of Ohno et al. For example, if the drive roller is not rotated at all, this conditional limitation does not occur. As such, it is the examiner's position that all of the features of claim 10 are met by U.S. Patent No. 5,093,690 (Ohno et al.).

Regarding claim 12, Figs. 1 and 18A-18D show that the first roll (unnumbered roll above 22 in Fig. 1) and second roll (23) are positioned in contact with the drive roll (including 22 and/or 28) and rotation of the drive roll rotates both the first roll and the second roll.

3. Claims 1-4 and 7-12 are rejected under 35 U.S.C. 102(b) as being anticipated by German Publication No. DE 3341413.

Regarding claim 1, Figs. 1-6 show a device to move media sheets simultaneously within an image forming device comprising:

a first media nip formed by a drive roll (1) and a first roll (3) that is positioned against the drive roll (1);

a second media nip formed by the drive roll (1) and a second roll (4) that is positioned against the drive roll (1);

a diverter (6a or 7a) operatively connected to the drive roll (1) and controlled to move to a first position (Fig. 3) when the drive roll (1) rotates in a first direction to align a first guide edge of the diverter (6a or 7a) to guide a first media sheet into the first media nip, the diverter controlled to move to a second position (Fig. 5) when the drive roll (1) rotates in a second direction to align a second guide edge of the diverter (6a or 7a) to guide the first media sheet out of the first media nip, and align the first guide edge of the diverter to simultaneously guide a second media sheet into the second media nip.

Regarding the recitation "a diverter operatively connected to the drive roll and **controlled to move to a first position when the drive roll rotates in a first direction to align a first guide edge of the diverter to guide a first media sheet into the first media nip, the diverter controlled to move to a second position when the drive roll rotates in a second direction to align a second guide edge of the diverter to guide the first media sheet out of the first media nip, and align the first guide edge of the diverter to simultaneously guide a second media sheet into the second media nip**", the underlined portions of this recitation are "conditional limitations" that need not ever occur. Since the bolded portion of this recitation contains conditional limitations that need not ever occur, this bolded portion of the recitation does not distinguish claim 1 from the prior art apparatus of German Publication No. DE 3341413. For example, if the drive roller is not rotated at all, this conditional limitation does not

occur. As such, it is the examiner's position that all of the features of claim 1 are met by German Publication No. DE 3341413.

Regarding claim 2, Figs. 1-6 show that the drive roll (1) is mounted to a drive shaft (not numbered), and the first roll (3) and the second roll (4) are each mounted to a housing of the image forming device.

Regarding claim 3, the English abstract discloses a motor attached to the drive roll (1) to rotate the drive roll in the first direction and the second direction.

Regarding claim 4, Fig. 4 shows that the first nip is formed on an upper edge of the drive roll (1), and the second nip is formed on a lower edge of the drive roll (1).

Regarding claim 7, Figs. 1-6 show that the first guide edge and the second guide edge intersect to form an acute angle.

Regarding claim 8, Fig. 4 shows that the diverter (7a) is positioned upstream from the drive roll (1).

Regarding claim 9, Figs. 1-6 show that the diverter (6a or 7a) is positioned at an intersection of a first media path and a second media path.

Regarding claim 10, Figs. 1-6 show a device to move media sheets simultaneously within an image forming apparatus comprising:

a drive roll (1) positioned against a first roll (3) to form a first nip and positioned against a second roll (4) to form a second nip;

a diverter (6a or 7a) operatively connected to the drive roll (1) and having a first guide edge and a second guide edge, the diverter (6a or 7a) positionable between a first orientation (Fig. 3) and a second orientation (Fig. 5); the diverter positioned in the first orientation (Fig. 3) when the drive roll (1) rotates in a first rotational direction to guide along the first guide edge a first media sheet that is driven by the first nip in a first direction; the diverter positioned in the second orientation (Fig. 5) when the drive roll (1) rotates in a second rotational direction to guide along the second guide edge the first media sheet that is driven by the first nip in a second direction, and simultaneously guide a second media sheet along the first guide edge that is being driven by the second nip in the first direction.

Regarding the recitation "the diverter positioned in the first orientation when the drive roll rotates in a first rotational direction to guide along the first guide edge a first media sheet that is driven by the first nip in a first direction; the diverter positioned in the second orientation when the drive roll rotates in a second rotational direction to guide along the second guide edge the first media sheet that is driven by the first nip in a second direction, and simultaneously guide a second media sheet along the first guide edge that is being driven by the second nip in the first direction", the underlined portions of this recitation are "conditional limitations" that need not ever occur. Since this recitation contains conditional limitations that need not ever occur, this recitation does not distinguish claim 10 from the prior art apparatus of German Publication No. DE 3341413. For example, if the drive roller is not rotated at all, this conditional limitation

does not occur. As such, it is the examiner's position that all of the features of claim 10 are met by German Publication No. DE 3341413.

Regarding claim 11, Fig. 4 shows that the diverter (7a) is positioned upstream from the drive roll (1).

Regarding claim 12, Figs. 1-6 show that the first roll (3) and second roll (4) are positioned in contact with the drive roll (1) and rotation of the drive roll rotates both the first roll and the second roll.

Response to Arguments

4. Applicant's arguments with respect to claims 1-4, 9-10 and 12 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

5. Claims 13-18 and 20-30 are allowed. Claims 5-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

Art Unit: 3653

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/17/2007



PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600